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EXAMINER

PHAM, THOMAS K

ART UNIT PAPER NUMBER

2121

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/732,835

Applicant(s)

RUUTU ET AL.

Examiner

Thomas K. Pham

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2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/10/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

First Action on the Merits

1. Claims 1-33 of U.S. Application 10/732,835 filed on 12/10/2003 are presented for examination.

Quotations of U.S. Code Title 35

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

6. Claims 1, 3-5, 10-12, 15-19, 21-23 and 27-34 are rejected under 35 U.S.C. 102(b) as being U.S. Patent No. 6,349,352 ("Lea").

Regarding claim 1

Lea teaches an apparatus configured to control an automation function, comprising:

- one or more automation modules connectable into an assembly (see FIG. 1 and Col. 7 lines 38-50), each automation module including, a data interface for exchanging data with other automation modules of the one or more automation modules (see Col. 7 lines 51-62); a processor coupled to the data interface (see Col. 11 lines 39-49); and a functional component operable by the processor for performing an independent automation task (see Col. 14 lines 37-43); and
- wherein the data interfaces of the one or more automation modules are coupled to exchange data communications for coordinating the respective functional components of the automation modules to perform the automation function (see Col. 13 line 60 to Col. 14 line 16).

Regarding claim 12

Lea teaches a method for performing an automatic control function, comprising:

- providing a first and second automation module (see FIG. 1 and Col. 7 lines 38-50), each automation module configured for performing an independent function (see Col. 14 lines 37-43);
- connecting the first and second automation modules into an assembly (see FIG. 1);

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- coordinating the independent functions of the first and second automation modules by communicating data between the first and second automation modules (see Col. 7 lines 51-62); and
- performing the automatic control function based on the coordinated independent functions of the first and second automation modules (see Col. 13 line 60 to Col. 14 line 16).

Regarding claim 19

Lea teaches a system for controlling an automation function, the system comprising:

- two or more control devices (see Col. 11 lines 26-38) each formed from one or more automation modules connectable into an assembly (see FIG. 1 and Col. 7 lines 38-50), each automation module including, a data interface for exchanging data with other automation modules of the one or more automation modules (see Col. 7 lines 51-62); a processor coupled to the data interface (see Col. 11 lines 39-49); a functional component operable by the processor for performing an independent automation task (see Col. 14 lines 37-43); and
- wherein the data interfaces of the one or more automation modules are coupled to exchange data communications for coordinating the respective functional components of the automation modules to perform a function of the control device (see Col. 13 line 60 to Col. 14 line 16); and
- wherein the control devices are configured to communicate with each other via the data interfaces of at least one of the automation modules of the respective control devices to

coordinate the functions of the respective control devices to perform the automation function (see Col. 12 lines 47-67).

Regarding claim 29

Lea teaches a computer-readable medium configured with instructions for causing a processor of a data processing arrangement to perform steps comprising:

- establishing communications with one or more automation modules connected into an assembly (see FIG. 1 and Col. 7 lines 38-50), the one or more automation modules being in data communication with each other, each automation module configured for performing an independent automation task (see Col. 14 lines 37-43);
- receiving data from the automation modules that describes the independent automation task associated with the automation modules (see Col. 13 lines 60-67);
- providing a user interface to create a data set used to coordinate the independent automation tasks of the automation modules to perform an automation function (see Col. 13 lines 1-13); and
- communicating the data set to at least one of the automation modules to perform the automation function (see Col. 13 lines 36-46).

Regarding claim 33

Lea teaches an automation module operable with other automation modules for performing an automation function, comprising:

- means for connecting with the other automation modules to form an automation assembly (see FIG. 1 and Col. 7 lines 38-50);
- means for performing an independent automation task (see Col. 14 lines 37-43); and

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- means for exchanging data with other automation modules of the assembly to coordinate the independent automation task with one or more independent automation tasks of the other automation modules to perform the automation function (see Col. 13 line 60 to Col. 14 line 16).

Regarding claims 3 and 21

Lea teaches wherein the data interfaces of the automation modules are accessible via a computing arrangement (see Col. 3 lines 4-8).

Regarding claims 4 and 22

Lea teaches wherein the computing arrangement actively controls the automation function (see Col. 3 lines 17-20).

Regarding claims 5 and 23

Lea teaches wherein the computing arrangement is configured to communicate a configuration to the apparatus for coordinating the functional components, and wherein the processors of the automation modules are configured to perform the automation function based on the configuration (see Col. 3 lines 20-36).

Regarding claims 10 and 27

Lea teaches wherein the independent automation task comprises at least one of data input, control output, and external communications (see FIG. 17B).

Regarding claims 11 and 28

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Lea teaches wherein the one or more automation modules further comprise a mechanical interface providing a physical attachment to other automation modules of the one or more automation modules (see Col. 5 lines 38-54).

Regarding claim 15

Lea teaches wherein coordinating the independent functions of the first and second automation modules further includes communicating from a computing arrangement to the automation modules a configuration for coordinating the independent functions of the first and second automation modules (see Col. 11 line 61 to Col. 12 line 3).

Regarding claim 16

Lea teaches wherein performing the automatic control function includes communicating commands from a computing arrangement to the automation modules to coordinate the functions of the first and second automation modules (see Col. 11 lines 39-58).

Regarding claim 17

Lea teaches wherein the independent functions of the first and second automation modules comprise at least one of data input, control output, and external communications (see FIG. 17B).

Regarding claim 18

Lea teaches wherein coupling the first and second automation modules into an assembly comprises mechanically attaching the first automation module to the second automation module (see Col. 5 lines 38-54).

Regarding claim 30

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Lea teaches providing a user interface to create the data set includes providing a graphical user interface having graphical components representing the one or more automation modules (see Col. 13 lines 1-13).

Regarding claim 31

Lea teaches wherein the data set is created by providing user-created graphical components representing coordinations between the independent automation tasks of the two or more automation modules (see Col. 13 lines 1-13).

Regarding claim 32

Lea teaches wherein the independent automation tasks of the automation modules comprise at least one of data input, control output, and external communications (see FIG. 17B).

Claim Rejections - 35 USC § 103

7. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea in view of U.S. Patent No. 5,929,748 (“Odinak”).

Regarding claims 2 and 20

Lea teaches wherein the data interfaces of the one or more automation modules but does not teach with the data interfaces are configured to transfer data via an electrical power interface.

However, Odinak teaches a home control system of one or more automation modules using electrical power lines as data communication medium (see Col. 3 lines 37-53) for the purpose of having a communication interface that utilizes a combination of high-bandwidth and low-bandwidth communication protocols over an existing household electrical wiring (see Col. 2 lines 40-42).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the data interface of Odinak with the system of Lea because it would provide for the purpose of having a communication interface that utilizes a combination of high-bandwidth and low-bandwidth communication protocols over an existing household electrical wiring.

8. Claims 6-9, 13, 14 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lea in view of U.S. Patent No. 6,288,641 ("Casais").

Regarding claims 6 and 24

Lea does not specifically teach the one or more automation modules include a wireless communications module.

However, Casais teaches a system operable to control an automation function of remotely monitor a surveillance area using one or more mobile terminals and transducers (automation modules) operable in a wireless communication environment (see Col. 2 lines 45-65) for the purpose of providing an increased flexibility in remote monitoring technologies (see Col. 2 lines 25-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the wireless communication of Casais with the system of Lea because it would provide for the purpose of providing an increased flexibility in remote monitoring technologies.

Regarding claims 7 and 25

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Casais teaches the wireless communications module includes a cellular communications module compatible with a cellular communications network (see Col. 4 lines 47-54).

Regarding claim 8

Casais teaches the cellular communications module is arranged to receive data from a mobile terminal to control at least one of the automation modules (see Col. 4 lines 55-65).

Regarding claim 9

Casais teaches wherein the cellular communications module is arranged to send data to a mobile terminal to communicate data originating from at least one of the automation modules (see Col. 6 lines 16-34).

Regarding claim 13

Lea does not specifically teach communicating a control command from a mobile terminal to at least one of the automation modules.

However, Casais teaches a system operable to control an automation function of remotely monitor a surveillance area using one or more mobile terminals and transducers communicating data originating from a mobile terminal to at least one of the transducers (see Col. 4 lines 55-65) for the purpose of providing an increased flexibility in remote monitoring technologies (see Col. 2 lines 25-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the wireless communication of Casais with the system of Lea because it would provide for the purpose of providing an increased flexibility in remote monitoring technologies.

Regarding claim 14

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Lea does not specifically teach communicating data originating from at least one of the automation modules to a mobile terminal.

However, Casais teaches a system operable to control an automation function of remotely monitor a surveillance area using one or more mobile terminals and transducers communicating data originating from at least one of the transducers to a mobile terminal (see Col. 6 lines 16-34) for the purpose of providing an increased flexibility in remote monitoring technologies (see Col. 2 lines 25-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the wireless communication of Casais with the system of Lea because it would provide for the purpose of providing an increased flexibility in remote monitoring technologies.

Regarding claim 26

Casais teaches a mobile terminal arranged to communicate data with the cellular communications module (see Col. 4 lines 47-54).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
Patent Examiner

A handwritten signature in black ink, appearing to read 'Tom Pham', with a long horizontal flourish extending to the right.

February 6, 2006